

WARM UP

1 Answer the following questions about electrical appliances.

- 1 If you could only have one electrical appliance in your home, which one would you choose and why?
- 2 Many people in Britain wash their clothes at the laundrette. Is there one in your town?
- 3 Could you live without a fridge at home? Why/Why not?
- 4 What products do you think you should keep in the fridge?
- 5 Do you think a dishwasher is useful? Why/Why not?
- 6 People in Britain usually have their washing machine in the kitchen. Where is yours?

GLOSSARY

powered: *alimentato*
ruined: *rovinato, danneggiato*
to deliver: *consegnare*
supply: *fornitura*
issues: *questioni*
battery: *pila*
reliable: *affidabile*
to achieve: *ottenere*
thrown away: *buttati via*
carried out: *effettuati*

The 'SolarChill' Project



SolarChill: Capturing the Power of the Sun to Save Lives

SolarChill is an international project which is developing an environmentally-friendly vaccine cooler powered by solar energy, so that vaccines may be distributed to children in developing countries, without the risk of the vaccine being ruined due to temperature changes during transport. In 2006, the SolarChill won the prestigious Cooling Industry Award for refrigeration in the category 'Environmental Pioneer' as a representation of new technology which makes sense from a business point of view, as well as protecting the environment. The aim of this project is to be able to deliver vaccines and refrigeration to areas of the world where the electricity supply is inadequate or totally non-existent. This project involves health, development and environmental issues, so international organisations, research institutes and industry are working together to produce this refrigeration unit which will be environmentally-friendly, battery-free, reliable, reasonably-priced and multi-source powered.

If public health programmes are to be a success, then they need equipment which will guarantee the cold chain to keep vaccines constantly cool during distribution. This is what SolarChill technology is striving to achieve, especially in those areas of the world with an unreliable electrical supply which can result in millions of pounds worth of vaccines being thrown away because they have not been kept at a cool stable temperature. Tests have already been carried out on SolarChill prototypes over an 18-month period in countries such as Senegal, Indonesia and Cuba where the refrigeration equipment performed well in temperatures of 32°C.

Even after six days without any solar energy, the refrigeration unit managed to keep the temperature down to between 10° and 15°C. Before the SolarChill refrigeration technology can be put on the market however, it has to be approved by the World Health Organisation, as WHO and UNICEF have a set of very high performance standards to be met.



www.solarchill.org

READING COMPREHENSION

2 **PET** Read the text and decide if the statements below are true (T) or false (F).

- 1 SolarChill has been developed by one country.
- 2 It has been designed just to distribute vaccines.
- 3 You will need batteries to make the refrigeration unit work.
- 4 It won't be expensive to purchase.
- 5 If the vaccine isn't kept cool, it will be useless.
- 6 Trial tests on prototypes lasted over a year.

T	F
<input type="checkbox"/>	<input type="checkbox"/>

VOCABULARY

3 Complete the text with the words from the box.

destination • distribution • network • importance • vaccines • manufacturer • temperature

The 'cold chain' is the (1) _____ of cooling equipment which ensures that (2) _____ are kept at a continuous cool (3) _____ from the moment they leave the (4) _____, through all the various (5) _____ channels, until they finally reach their (6) _____ where they are to be administered. If the temperature is not maintained, then the vaccine is no longer effective, so maintaining the 'cold chain' is of utmost (7) _____.

WRITING

4 **PET** What do you think can be done to help poor countries in the world with the use of new technologies and alternative energy resources? Write a short essay (about 100 words) explaining your ideas.

